UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,324	12/20/2005	Theodora Calogeropoulou	MAK/102/PC/US	6437

2543 7590 05/11/2009

ALIX YALE & RISTAS LLP
750 MAIN STREET
SUITE 1400
HARTFORD, CT 06103

EXAMINER	
BALASUBRAMANIAN, VENKATARAMAN	

ART UNIT	PAPER NUMBER
1624	

MAIL DATE	DELIVERY MODE
05/11/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/531,324	CALOGEROPOULOU ET AL.	
	Examiner	Art Unit	
	/Venkataraman Balasubramanian/	1624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 February 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *7/15/2005 & 8/29/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election of Group I, claims 1-22, drawn to compound of formula shown in claim 1 wherein Y is a carbocyclic group or an aromatic group, composition and method of use in the reply filed on 2/24/2009 is acknowledged. Claims 1-22 will be examined to the extent they embrace the elected subject matter. Although applicants have not stated in the lection explicitly the election made with traversal, based on the arguments present in pages 2-7, the election appears to be with traverse. The traversal is on the ground(s) that there is unity of invention in the genus of compounds of formula shown in claim 1. This is not found persuasive for reasons of record. To repeat:

First of all, as noted in the previous office action, there are two criteria for a proper requirement for restriction for a 371 of PCT application entering national stage.

Broadly, unity of invention exists where compounds included within a Markush group (1) share a common utility, and (2) share a substantial structural feature disclosed as being essential to that utility.

Both these criteria are to be met with.

Contrary to applicants' urging, as noted above in the previous office action, instant inventions fail to meet both these conditions.

Applicants have argued that invoking In re Weber and In re Harnish that the restriction requirement is improper. Again this argument is not persuasive and the case laws cited are not the point. Careful analysis of the case laws will show that there is condition clause above set two criteria should be considered for establishing unity of

invention. To quote MPEP 803 'Since the decisions In re Weber, 580 F.2d 455, 198 USPQ 328 (CCPA 1978) and In re Haas, 580 F.2d 461, 198 USPQ 334 (CCPA 1978), it is improper for the Office to refuse to examine that which applicants regard as their invention, unless the subject matter in a claim lacks unity of invention. In re Harnish, 631 F.2d 716, 206 USPQ 300 (CCPA 1980); and Ex parte Hozumi, 3 USPQ2d 1059 (Bd. Pat. App. & Int. 1984). Broadly, unity of invention exists where compounds included within a Markush group (1) share a common utility, and (2) share a substantial structural feature disclosed as being essential to that utility.

First of all, applicants have not shown clearly or established what portion of the core share a substantial structural feature disclosed as being essential to that utility. Applicants assert that A-X-PO_3-W is the family of compounds to be examined. But except for the -PO_3-group the rest of the core and groups are variable core or groups and a -PO_3-group cannot be considered as common core essential for the activity.

Secondly, even those compounds with the applicants' asserted A-X-PO_3-W do not share the same utility asserted by the applicants. The IDS (provided by the applicants) shows compounds with same structural make-up as having different uses. Thus, the said core does not share common utility.

Thirdly, examiner also noted in the previous office action "Should applicant traverse on the ground that the core species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the

evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention". Applicants have not asserted that the two groups are not distinct. Applicants have not submitted evidence or identified such evidence now of record showing the core group to be obvious variants or clearly admitted on the record that all core groups embraced in the instant inventions are equivalent. In which case, examiner needed not search all cores. A prior art which anticipates any one of the groups embraced by a specific core (i.e. choices of I or II) may then render rest of the core groups as obvious variant. In other words, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention. It should be noted that applicants have excluded some prior art compounds by a proviso, which would be applicable to part of the genus as obvious variant under 35 U.S.C. 103(a). In want of such assertion or evidence, unity of invention of the huge genus of compounds for proper examination is deemed as lacking as there is no equivalency and each group is distinct and independent.

Finally, the references provided by the applicants in IDS as well as those now applied clearly shows structurally related compounds of instant claims have different utility, which would negate the common utility requirement & sharing the substantial structural feature.

It should be also noted that applicants have made only 30 compounds while genus encompasses over billion compounds and hence the genus cannot be considered as totally represented by the species. In fact the Internal Search Authority noted that "Reason for the limitation of the search:

The present claims 1-15,17,19, 21-24 relate to an extremely large number of possible compounds. Support and disclosure in the sense of Article 84 and 83 EPC is to be found however for only a very small proportion of the compounds claimed, see the examples and the figures. The non-compliance with the substantive provisions is to such an extent, that a meaningful search of the whole claimed subject-matter of the claim could not be carried out (Rule 45 EPC and Guidelines B-VIII, 3). The extent of the search was consequently limited. The search of claims 1-15,17,19,21-24 was restricted to those claimed compounds to appear to be supported and a generalization of their structural formulae".

Hence, the instant claims fail to meet both the requirement stated above.

Based on the foregoing reasons, the requirement is still deemed proper and is therefore made FINAL.

It should be noted that although election species is not a requirement in a PCT application entering national stage, as full scope of search is not possible with such a generic genus of over billion compounds, the current search is based on a genus of compounds encompassing the species elected by the applicants as guidance.

Information Disclosure Statement

References cited in the Information Disclosure Statements, filed on 7/15/2005 & 8/29/2006, are made of record.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

1. Recitation of " including" in claim 1 and "comprises" and " comprising", in claims 1-22 renders these claims indefinite as the transitional term "including" is open and implies more than what is being positively recited therein. See MPEP 2111.03 which states under transitional phrases The transitional term "comprising", which is synonymous with "including," "containing," or "characterized by," is inclusive or open-ended and does not exclude additional, unrecited elements or method steps. See, e.g., Genentech, Inc. v. Chiron Corp., 112 F.3d 495,501, 42 USPQ2d 1608, 1613 (Fed. Cir. 1997) ("Comprising" is a term of art used in claim language which means that the named elements are essential, but other elements may be added and still form a construct within the scope of the claim.); Moleculon Research Corp. v. CBS, Inc., 793 F.2d 1261, 229 USPQ 805 (Fed. Cir. 1986); In re Baxter, 656 F.2d 679, 686, 210 USPQ 795, 803 (CCPA 1981); Ex parte Davis, 80 USPQ 448, 450 (Bd. App. 1948) ("comprising" leaves "the claim open for the inclusion of unspecified ingredients even in major amounts").

2. Recitation of "and physiologically acceptable salts, including isomers and stereisomers," in claim 1 renders claim 1 and their dependent claims indefinite as it is not clear whether these claims are compound claims or composition claims containing the compound. Note Markush choices should be alternate and singular form. Replacement of "and physiologically acceptable salts, including isomers and

stereisomers," with "or physiologically acceptable salt, or isomer or stereisomer," is suggested.

3. Claim 22 is indefinite as it does not recite a host and who is in need of such a treatment.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 22 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for treating infection due leishmania with species shown in the examples, does not reasonably provide enablement for treating all protozoal diseases with huge genus of compounds embraced in formula of claim 1 based on the mode of action of instant compounds as phospholipids analogs, as embraced in claim 22. The specification does not enable any physician skilled in the art of medicine, to use the invention commensurate in scope with the claim.

In evaluating the enablement question, several factors are to be considered. Note In re Wands, 8 USPQ2d 1400 and Ex parte Forman, 230 USPQ 546. The factors include: 1) The nature of the invention, 2) the state of the prior art, 3) the predictability or lack thereof in the art, 4) the amount of direction or guidance present, 5) the presence or absence of working examples, 6) the breadth of the claims, and 7) level of skill in the art, 8) the quantity of experimentation needed.

1) The nature of the invention:

The instant method of use claim 22 is drawn to treating any or all protozoal diseases by the mode of action as phospholipids analogs in general.

Instant claim 22, as recited, are reach through claim. A reach through claim is a claim drawn to a mechanistic, receptor binding or enzymatic functionality in general format and thereby reach through a scope of invention for which they lack adequate written description and enabling disclosure in the specification.

In the instant case, based on the interaction with lipid membrane as phospholipids analogs of instant claim reaches through inhibiting and treating any or all protozoal diseases in general and thereby they lack adequate written description and enabling disclosure in the specification.

The scope of the claim 22 involves billions of compounds of claim 1 as well as the thousand of diseases embraced by the terms protozoal diseases. There is large number of protozoal diseases and there is no showing that all of them are susceptible to analogs of phospholipids. Specification main shows treating leishmania and no other protozoal diseases. In addition some of the protozoal diseases such chagas disease, malaria etc are very difficult to treat and an known phospholipids analogs are not shown to be effective against them

In addition, instant genus would include billions compounds based on the variable groups, A, X, and W. Representative examples of structurally diverse compounds generically embraced in the invention are not shown to possess in vitro activity much less in vivo uses claimed herein. Instant genus of phospho compound embrace compounds with substituents bearing plethora of structural cores and

functional groups and other groups permitted at instant variables which include variously substituted monocyclic rings, bicyclic rings, tricyclic rings with variable ring sizes and variable heteroatoms variety of reactive functional groups such COOH, OH ,SH, amido, sulfoxides, sulfones nitrile, carbamates etc. There is no reasonable basis for assuming that the myriad of compounds embraced by the claims will all share the same bioactivity profile since they are so structurally dissimilar as to be chemically non-equivalent and there is no basis in the prior art for assuming the same. Note In re Surrey 151 USPQ 724 regarding sufficiency of disclosure for Markush group. In addition, the scope of treating pain includes any or all pain due various diseases. One need to extensive unduly experimentation to find what compound works and what does work in variety of assays outlined in the specification. Thus, the scope of claims is extremely broad.

More specifically, instant compounds are disclosed to be phospholipids analogs and it is recited that the instant compounds are therefore useful in treating any or all protozoal diseases stated above for which applicants provide no competent evidence. It appears that the applicants are asserting that the embraced compounds because of their mode action as cell proliferation inhibitor that would be useful for all sorts of protozoal diseases. However, the applicants have not provided any competent evidence that the instantly disclosed tests are highly predictive for all the uses disclosed and embraced by the claim language for the intended host.

No compound has ever been found to treat protozoal diseases of all types generally. Since this assertion is contrary to what is known in medicine, proof must be

provided that this revolutionary assertion has merits. The existence of such a "compound" is contrary to our present understanding of infectious diseases. Different types of protozoa affect different organs and have different methods of growth and harm to the body.

Also, note MPEP 2164.08(b) which states that claims that read on "... significant numbers of inoperative embodiments would render claims nonenabled when the specification does not clearly identify the operative embodiments and undue experimentation is involved in determining those that are operative.". Clearly that is the case here.

Thus, it is beyond the skill of clinician today to get an agent to be effective against all protozoa generally. Note substantiation of utility and its scope is required when utility is "speculative", "sufficiently unusual" or not provided. See Ex parte Jovanovics, 211 USPQ 907, 909; In re Langer 183 USPQ 288. Also note Hoffman v. Klaus 9 USPQ 2d 1657 and Ex parte Powers 220 USPQ 925 regarding type of testing needed to support in vivo uses.

Next, applicant's attention is drawn to the Revised Utility and Written Description Guidelines, at 66 FR 1092-1099, 2001 wherein it is emphasized that 'a claimed invention must have a specific and substantial utility'. The disclosure in the instant case is not sufficient to enable the instantly claimed method treating solely based on the inhibitory activity disclosed for the compounds.

2) The state of the prior art: The state of the art is indicative of the requirement for undue experimentation. See Stuart et al., Anderson et al., and Singh et al. Since

claim 22 is drawn to a method of treating all protozoal diseases, much experimentation and in vivo testing must be carried out to make sure that the administration of the compounds of formula (I) results in enhanced therapeutic effects without harmful side effects.

Hence, in the absence of showing of correlation between all the diseases claimed as capable of treatment with inhibition of analogs of phospholipids one of skill in the art is unable to fully predict possible results from the administration of the compounds of formula (I) due to the unpredictability of the role of the instantly claimed compounds. For example, since it is known that the challenge of cancer treatment has been to target specific therapies to pathogenetically distinct protozoa types, that protozoa classification has been based primarily on morphological appearance of the protozoa and that protozoa with similar histopathological appearance can follow significantly different clinical courses and show different responses to therapy.

Applicant's disclosure does not enable one of ordinary skill in the art to use the claimed invention within the entire scope of the diseases listed above. There is no compound, let alone an entire class of compounds that can treat the various and divergent diseases listed above, as claimed. Cell proliferation by various mode of action is still exploratory and requires further experimentation.

Those of skill in the art recognize that in vitro assays and or cell-cultured based assays are generally useful to observe basic physiological and cellular phenomenon such as screening the effects of potential drugs. However, clinical correlations are generally lacking. The greatly increased complexity of the in vivo environment as

compared to the very narrowly defined and controlled conditions of an in- vitro assay does not permit a single extrapolation of in vitro assays to human diagnostic efficacy with any reasonable degree of predictability. In vitro assays cannot easily assess cell-cell interactions that may be important in a particular pathological state. Furthermore it is well known in the art that cultured cells, over a period time, lose phenotypic characteristics associated with their normal counterpart cell type. Freshney. (Culture of Animal Cells, A Manual of Basic Technique, Alan R. Liss, Inc., 1983, New York, p4) teach that it is recognized in the art that there are many differences between cultured cells and their counterparts in vivo. These differences stem from the dissociation of cells from a three-dimensional geometry and their propagation on a two-dimensional substrate. Specific cell interactions characteristic of histology of the tissue are lost. The culture environment lacks the input of the nervous and endocrine systems involved in homeostatic regulation in vivo. Without this control, cellular metabolism may be more constant in vitro but may not be truly representative of the tissue from which the cells were derived. This has often led to tissue culture being regarded in a rather skeptical light (p. 4, see Major Differences/n Vitro). Clearly it is well known in the art that cells in culture exhibit characteristics different from those in vivo and cannot duplicate the complex conditions of the in vivo environment involved in host-protozoa and cell-cell interactions.

3) The predictability or lack thereof in the art: Applicants have not provided any competent evidence or disclosed tests that are highly predictive for the pharmaceutical use for treating any or all protozoal diseases by the instant compounds.

Pharmacological activity in general is a very unpredictable area. Note that in cases involving physiological activity such as the instant case, “the scope of enablement obviously varies inversely with the degree of unpredictability of the factors involved”. See In re Fisher, 427 F.2d 833, 839, 166 USPQ 18, 24 (CCPA 1970).

4) The amount of direction or guidance present:

A disclosure should contain representative examples which provide reasonable assurance to one skilled in the art that the compounds which fall within the scope of a claim will posses the alleged activity. The only direction or guidance present in the specification is the listing of diseases applicant considers treatable. Receptor activity is generally unpredictable and a highly structure specific area, and the data provided is insufficient for one of ordinary skill in the art to extrapolate to the other compounds of the claims.

The disclosure does not provide how this in vitro data correlates to the treatment of the assorted diseases claimed. The instant specification is short of any examples or data in regards to the supposed treating of the aforementioned diseases. Applicants have not provided any competent evidence or disclosed tests that are highly predictive for the pharmaceutical use of the instant compounds. Pharmacological activity in general is a very unpredictable area. Note that in cases involving physiological activity such as the instant case, "the scope of enablement obviously varies inversely with the degree of unpredictability of the factors involved." See In re Fisher, 427 F.2d 833, 839, 166 USPQ 18, 24 (CCPA 1970).

5) the presence or absence of working examples: Specification has no working examples to show treating any or all protozoal disorders and the state of the art is that the effects of cell proliferation inhibitors are unpredictable.

6) The breadth of the claims: The instant claims embrace use of a huge genus of compounds and any or all protozoal diseases with a genus of billion compounds or more based on 30 compounds exemplified in the specification for treating leishmania.

7)The level of skill in the art

The level of skill in the art is high. However, due to the unpredictability in the pharmaceutical art, it is noted that each embodiment of the invention is required to be individually assessed for physiological activity by in vitro and in vivo screening to determine which compounds exhibit the desired pharmacological activity and which diseases would benefit from this activity.

Thus, the specification fails to provide sufficient support of the broad use of the compounds of the instant claims for the treatment of the various claimed diseases as a result necessitating one of skill to perform an exhaustive search for which disorders can be treated by what compounds of the instant claims in order to practice the claimed invention.

8) The quantity of experimentation: The quantity of experimentation needed is undue experimentation. It would be an undue burden to one skilled in the pharmaceutical arts since there is inadequate guidance given to the skilled artisan, regarding the pharmaceutical use, for the reasons stated above. One of skill in the art would need to determine what diseases out of the multitude claimed would be benefited

(i.e. treated) by the administration of the compounds of formula (I) and would furthermore have to determine which of the claimed compounds would provide treatment of which disease.

Thus, factors such as “sufficient working examples”, “the level of skill in the art” and “predictability”, etc. have been demonstrated to be sufficiently lacking in the instant case for the instant method claims. In view of the breadth of the claims, the chemical nature of the invention, the unpredictability of enzyme-inhibitor interactions in general, and the lack of working examples regarding the activity of the claimed compounds towards treating the variety of protozoal diseases of the instant claims, one having ordinary skill in the art would have to undergo an undue amount of experimentation to use the instantly claimed invention commensurate in scope with the claims.

Genentech Inc. v. Novo Nordisk A/S (CA FC) 42 USPQ2d 1001, states that "a patent is not a hunting license. It is not a reward for search, but compensation for its successful conclusion" and "[p]atent protection is granted in return for an enabling disclosure of an invention, not for vague intimations of general ideas that may or may not be workable".

Therefore, in view of the Wands factors and In re Fisher (CCPA 1970) discussed above, to practice the claimed invention herein, a person of skill in the art would have to engage in undue experimentation to test which diseases can be treated by the compounds encompassed in the instant claims, with no assurance of success.

MPEP §2164.01(a) states, “A conclusion of lack of enablement means that, based on the evidence regarding each of the above factors, the specification, at the

time the application was 'filed, would not have taught one skilled in the art how to make and/or use the full scope of the claimed invention without undue experimentation. In re Wright, 999 F.2d 1557,1562, 27 USPQ2d 1510, 1513 (Fed. Cir. 1993)." That conclusion is clearly justified here and undue experimentation will be required to practice Applicants' invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4-15, 17, 19 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Peterson et al., US 5,776,915.

Peterson teaches several phosphocholine analogs which include instant compounds. See column 2, formula shown therein and note with the given definition of R, compounds taught by Peterson include instant compounds. See Examples 2-6 shown in column 13.

Claims 1, 2, 4-15, 17, 19 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Counsell et al., US 5,087,721.

Counsell teaches several phosphocholine analogs which include instant compounds. See column 2, formula shown therein and note with the given definition of R, compounds taught by Peterson include instant compounds. See Examples 2-39 shown in column 8-11 and Figure1-2.

Claims 1, 2, 4-15, 17, 19 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Freeman et al., WO 98/55533.

Freeman teaches several phosphocholine analogs which include instant compounds. See page 3, formula I shown therein and note with the given definition of X and R^1, compounds taught by Freeman include instant compounds. See Example 4 shown in pages 13-14.

Claims 1, 2, 4-15, 17, 19 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Chabrier et al., BE 2359245.

Chabrier teaches several phosphocholine analogs which include instant compounds. See page 2, formula 1 shown therein and note with the given definition of A, compounds taught by Chabrier include instant compounds. See Examples 3-6 shown in pages 5-9.

Claims 1, 2, 4-15, 17, 19 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamaguchi et al., Macromolekulare Chemie, (1980), 190(5), 1195-11205: CA 111:58423, 1989(CAPLUS Abstract provided).

Yamaguchi teaches several phosphocholine analogs which include instant compounds. See Compounds shown in the CAPLUS Abstract.

Conclusion

Any inquiry concerning this communication from the examiner should be addressed to Venkataraman Balasubramanian (Bala) whose telephone number is (571) 272-0662. The examiner can normally be reached on Monday through Thursday from 8.00 AM to 6.00 PM. The Supervisory Patent Examiner (SPE) of the art unit 1624 is

James O. Wilson, whose telephone number is 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned (571) 273-8300. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAG. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-2 17-9197 (toll-free).

/Venkataraman Balasubramanian/

Primary Examiner, Art Unit 1624